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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,947	06/27/2003	Wilfred E. Pearce	BOEI-1-1148	3077

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EXAMINER

PECHHOLD, ALEXANDRA K

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 04/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/607,947	PEARCE ET AL.	
	Examiner	Art Unit	
	Alexandra K. Pechhold	3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14,34-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-14 and 34-37 are rejected under 35 U.S.C. 102(b) as being anticipated by Baerveldt (US 5,338,130).**

Regarding claim 1, Baerveldt discloses a load carrying expansion joint comprising:

- a first load-bearing support member (since the elements comprising this support member in Baerveldt help to support the load of the pavement surface there above, since Baerveldt states in column 1, lines 67-68 and column 2, lines 1 and 13-15 that the upper surface of the main body 1 is substantially coplanar with or beneath the upper traffic bearing surface)

including:

- a first generally planar structural member (seen as the upper planar surface of sealing strip S in Fig. 1) having an upper face which is capable of slidably supporting a bottom face of a traffic bearing surface of at least one section of a structure receivable thereon, and

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- second and third generally planar structural members (seen as retaining elements 2 in Fig. 1) each having an upper face capable receiving a bottom face of a portion of a bottom surface of the at least one section of the structure receivable thereon and capable of being attached thereto, the second and third members being vertically spaced-apart from and below the first member (see Fig. 1 where the top surface of S is above elements 2), and
- fourth and fifth structural members (seen as the vertical portions of S that are directly above the interior edges of the slabs) that connect the first member with the second member and the first member with the third member, respectively (as shown in Fig. 1); and
- an expansion device that provides a lateral connecting structure between the second and third members (seen as the rest of the sealing strip S), including:
 - a central portion (seen as the bottom portion of the central part of S in Fig. 1) that is capable of being attached to a second support member (seen the indirect attachment in Fig. 1 to heads of bolts B) that supports the bottom face of the bottom surface of the at least one section of the structure thereon; and
 - end portions (seen as the parts of the sealing strip S that extend laterally above the slabs) each having an upper face that receives a bottom face of the second and third members thereon (as seen in Fig. 1 where the upper face of part of the laterally extending surfaces of S lie directly below the retaining

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elements 2) and a bottom face that is capable of being received on an upper face of the second support member (seen as heads of bolts B as seen in Fig. 1).

Regarding claim 2, the center of the strip (S) has a slit extending downward along its length, which can be viewed as a hole, and it is certainly capable of receiving a fastener therein.

Regarding claim 3, Fig. 1 illustrates adjacent sections of the structure, seen as (1) and (2).

Regarding claim 4, the retaining elements (2) shown in Fig. 1 each define a hole for receiving a fastener therein.

Regarding claim 5, the at least one section, seen as (1) in Fig. 1, is capable of allowing sliding of an overlapping portion of a second section thereon.

Regarding claims 6 and 7, composite materials are disclosed in column 2, lines 44-48, with some materials (such as thermoplastic elastomer) having equivalent expansion characteristics.

Regarding claim 8, bridge and bridge decks are disclosed in column 1, lines 7-11.

Regarding claim 9, the flexible seal strip (S) can be viewed as an expansion spring, which has a hole, seen in Fig. 1 as the longitudinal valley in the center extending downwards from the top, or the two channel-like holes extending through the interior.

Regarding claim 10, a stiffening member can be viewed as deflector

elements (3) in Fig. 1.

Regarding claim 11, Baerveldt discloses the limitations of the claimed invention as discussed in regards to claim 1 and 9 above. The members recited can be considered composite member since Baerveldt discloses in column 2, lines 44-48 and 59-66 that material such as silicone rubber (which is a formed of a cross-linked polymer reinforced with silica) and thermoplastics can be used for the sealing strip (S) and retaining element (2), and thermoplastics can be composites. The central portion (seen as the bottom portion of the central part of S in Fig. 1) defines a hole (seen as the two chambers formed above the surface) that is capable of receiving a fastener therein that is capable of attaching the expansion spring to a second support member that supports the bottom face of the bottom surface of the adjacent sections of the structure thereon. With respect to the recitation "for attaching the expansion spring to a support member that supports the adjacent sections of the structure thereon", it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Regarding claims 12 and 13, composite materials are disclosed in column 2, lines 44-48, with some materials (such as thermoplastic elastomer) having equivalent expansion characteristics.

Regarding claim 14, bridge and bridge decks are disclosed in column 1, lines 7-11.

Regarding claims 34, 35, and 36, Baerveldt discloses the limitations of the

claimed invention as discussed in regards to claims 1, 9, and 11 above.

Regarding claim 37, Baerveldt discloses the limitations of the claimed invention as discussed in regards to claim 10 above.

Response to Arguments

3. Applicant's arguments filed 2/6/06 have been fully considered but they are not persuasive. With respect to claims 1 and 11, the applicant has overcome the 35 USC 112 second paragraph rejection by adding the fourth and fifth members to the claims, which are essential elements to the entire structure. The applicant has added language to claims 1 and 11 to recite that the support member being "load-bearing" and the expansion joint being "load carrying", and the first, second and third members being "structural". The applicant argues that since the strip (S) of Baerveldt is flexible, it is not load-bearing or load carrying, and does not have any "structural" members. The Examiner disagrees, since although the sealing strip (S) of Baerveldt is of a flexible material, it is inserted between two slabs with a traffic-bearing surface above the strip (S). Therefore, the strip, being attached to the adjacent slabs, will indirectly bear some of the load of the traffic bearing surface above, simply by being adjoined to the slabs. The Examiner also does not agree with the applicant's argument that Baerveldt does not have "structural" members, since what the Examiner sets forth as such "members" can be considered "structures" in Baerveldt's invention. Merriam Webster's online dictionary defines "structural" as "**2 a** : of, relating to, or affecting structure". The Examiner contends that what the Examiner equates with the claimed first, second third,

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fourth, and fifth members in Baerveldt contribute to the structure of the expansion joint system therein.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (571) 272-6994. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (571) 272-6998. The fax phone number for this Group is (571) 273-8300.


Thomas B. Will
Supervisory Patent Examiner
Group 3600

AKP
4/2/06